RAW SEQUENCE LISTING DATE: 01/14/2002 DA

```
5 <110> APPLICANT: INCYTE GENOMICS, INC.
              LAL, Preeti
      7
              YANG, Junming
                                                                    ENTERED
      8
              YUE, Henry
              HILLMAN, Jennifer L.
     10
              TANG, Y. Tom
              BANDMAN, Olga
     11
     12
              BURFORD, Neil
     13
              BAUGHN, Mariah R.
              AZIMZAI, Yalda
     15
              LU, Dyung Aina M.
              AU-YOUNG, Janice
     16
              PATTERSON, Chandra
     17
     19 <120> TITLE OF INVENTION: HUMAN TRANSPORT PROTEINS
     21 <130> FILE REFERENCE: PF-0709 PCT
C--> 23 <140> CURRENT APPLICATION NUMBER: US/10/009,328
C--> 24 <141> CURRENT FILING DATE: 2001-12-04
     26 <150> PRIOR APPLICATION NUMBER: 60/139,923; 60/148,177; 60/149,357; 60/162,287
W--> 27 <151> PRIOR FILING DATE: 1999-06-17; 1999-08-10; 1999-08-18; 1999-10-28
     29 <160> NUMBER OF SEQ ID NOS: 86
     30 <170> SOFTWARE: PERL Program
     32 <210> SEQ ID NO: 1
     33 <211> LENGTH: 623
    34 <212> TYPE: PRT
     35 <213> ORGANISM: Homo sapiens
     37 <220> FEATURE:
     38 <221> NAME/KEY: misc_feature
     39 <223> OTHER INFORMATION: Incyte ID No: 264114CD1
     41 <400> SEQUENCE: 1
    42 Met Ser Thr Gln Asp Glu Arg Gln Ile Asn Thr Glu Tyr Ala Val
    43
                                                                  15
                                             10
    44 Ser Leu Glu Gln Leu Lys Leu Phe Tyr Glu Gln Gln Leu Phe
    46 Thr Asp Ile Val Leu Ile Val Glu Gly Thr Glu Phe Pro Cys His
    47
                         35
    48 Lys Met Val Leu Ala Thr Cys Ser Ser Tyr Phe Arg Ala Met Phe
    50 Met Ser Gly Leu Ser Glu Ser Lys Gln Thr His Val His Leu Arg
                         65
                                             70
    52 Asn Val Asp Ala Ala Thr Leu Gln Ile Ile Ile Thr Tyr Ala Tyr
    54 Thr Gly Asn Leu Ala Met Asn Asp Ser Thr Val Glu Gln Leu Tyr
                                            100
                         95
    56 Glu Thr Ala Cys Phe Leu Gln Val Glu Asp Val Leu Gln Arg Cys
                        110
                                            115
    58 Arg Glu Tyr Leu Ile Lys Lys Ile Asn Ala Glu Asn Cys Val Arg
    59
                                            130
                                                                 135
                        125
```

60 61	Leu	Leu	Ser	Phe	Ala 140	Asp	Leu	Phe	Ser	Cys 145	Glu	Glu	Leu	Lys	Gln 150
	Ser	Ala	Lys	Arg	Met 155	Val	Glu	His	Lys	Phe 160	Thr	Ala	Val	Tyr	His 165
	Gln	Asp	Ala	Phe	Met 170	Gln	Leu	Ser	His		Leu	Leu	Ile	Asp	
	Leu	Ser	Ser	Asp	Asn 185	Leu	Asn	Val	Glu		Glu	Glu	Thr	Val	
68	Glu	Ala	Ala	Met	Leu	Trp	Leu	Glu	Tyr	Asn	Thr	Glu	Ser	Arg	Ser
	Gln	Tyr	Leu	Ser	200 Ser	Val	Leu	Ser	Gln		Arg	Ile	Asp	Ala	
	Ser	Glu	Val	Thr	215 Gln	Arg	Ala	Trp	Phe		Gly	Leu	Pro	Pro	
73 74	Asp	Lys	Ser	Val	230 Val	Val	Gln	Gly	Leu		Lys	Ser	Met	Pro	
75 76	Phe	Phe	Lys	Pro	245 Arg	Leu	Gly	Met	Thr	250 Lys	Glu	Glu	Met	Met	255 Ile
77 78	Phe	Ile	Glu	Ala	260 Ser	Ser	Glu	Asn	Pro	265 Cys	Ser	Leu	Tyr	Ser	270 Ser
79 80	Val	Cvs	Tvr	Ser	275 Pro	Gln	Ala	Glu	Lvs	280 Val	Tvr	Lvs	Leu	Cvs	285 Ser
81		_	_		290 Leu					295	_				300
83				_	305		_			310					315
85		_		-	11e 320		_	_		325			_		330
86 87	_				Ser 335				_	340					345
88 89	Thr	Val	Asn	Cys	Phe 350	Tyr	Trp	Phe	Asp	Ala 355	Gln	Gln	Asn	Thr	Trp 360
90 91	Phe	Pro	Lys	Thr	Pro 365	Met	Leu	Phe	Val	Arg 370	Ile	Lys	Pro	Ser	Leu 375
92 93	Val	Cys	Cys	Glu	Gly 380	Tyr	Ile	Tyr	Ala	Ile 385	Gly	Gly	Asp	Ser	Val 390
94 95	Gly	Gly	Glu	Leu	Asn 395	Arg	Arg	Thr	Val	Glu 400	Arg	Tyr.	Asp	Thr	Glu 405
	Lys	Asp	Glu	Trp	Thr 410	Met	Val	Ser	Pro		Pro	Cys	Ala	Trp	Gln 420
	Trp	ser	Ala		Val 425	Val	Val	His	Asp		Ile	Tyr	Val	Met	
	Leu	Asn	Leu			Cys	Tyr	Phe	Pro		Ser	Asp	Ser	Trp	Val
101					440		-			445		_		-	450
102	Glu	Met	. Ala	Met	Arg	Gln	Thr	Ser	Arg	Ser	Phe	Ala	Ser	Ala	Ala
103					455					460					465
		Phe	Gly	Asp	_		Phe	Tyr	Ile	_	_	Leu	His	Ile	Ala
105					470					475					480
		Asn	Ser	Gly		_	Leu	Pro	Ser			Val	. Asp	Gly	Ser
107		Val	ሞከም	val	485		ጥህን	Δan	Val	490 Asn		Δen	Glu	фъъ	495 Lys
T 0 0	OCT	v a I		, ar	Jiu		. <u></u> .	1125	, u T		-y 3	للجدء	. UIU		בעם

```
510
109
                   . 500
110 Met Ala Ala Asn Ile Pro Ala Lys Arg Tyr Ser Asp Pro Cys Val
111
                    515
112 Arg Ala Val Val Ile Ser Asn Ser Leu Cys Val Phe Met Arg Glu
113
                    530
                                         535
114 Thr His Leu Asn Glu Arg Ala Lys Tyr Val Thr Tyr Gln Tyr Asp
                    545
                                         550
115
116 Leu Glu Leu Asp Arg Trp Ser Leu Arg Gln His Ile Ser Glu Arg
                    560
                                         565
117
118 Val Leu Trp Asp Leu Gly Arg Asp Phe Arg Cys Thr Val Gly Lys
                    575
                                         580
119
120 Leu Tyr Pro Ser Cys Leu Glu Glu Ser Pro Trp Lys Pro Pro Thr
                    590
                                         595
122 Tyr Leu Phe Ser Thr Asp Gly Thr Glu Glu Phe Glu Leu Asp Gly
                                         610
                                                             615
                    605
124 Glu Met Val Ala Leu Pro Pro Val
125
126 <210> SEQ ID NO: 2
127 <211> LENGTH: 99
128 <212> TYPE: PRT
129 <213> ORGANISM: Homo sapiens
131 <220> FEATURE:
132 <221> NAME/KEY: misc_feature
133 <223> OTHER INFORMATION: Incyte ID No: 1455669CD1
135 <400> SEQUENCE: 2
136 Met Ala Ala Pro Ala Glu Pro Cys Ala Gly Gln Gly Val Trp Asn
                                          10
138 Gln Thr Glu Pro Glu Pro Ala Ala Thr Ser Leu Leu Ser Leu Cys
                     20
140 Phe Leu Arg Thr Ala Gly Val Trp Val Pro Pro Met Tyr Leu Trp
141
142 Val Leu Gly Pro Ile Tyr Leu Leu Phe Ile His His Gly Arg
                                          55
                     50
144 Gly Tyr Leu Arg Met Ser Pro Leu Phe Lys Ala Lys Met Val Ala
                     65
                                          70
146 Ala Ile Pro Gly Ser Leu Glu Pro Gly Asn Val Arg Gly Arg Gln
                     80
148 Gly Thr Gly Trp Asn Leu Val Lys Ser
149
150 <210> SEQ ID NO: 3
151 <211> LENGTH: 374
152 <212> TYPE: PRT
153 <213> ORGANISM: Homo sapiens
155 <220> FEATURE:
156 <221> NAME/KEY: misc_feature
157 <223> OTHER INFORMATION: Incyte ID No: 2084989CD1
159 <400> SEQUENCE: 3
160 Met Glu Ser Lys Met Gly Glu Leu Pro Leu Asp Ile Asn Ile Gln
```

```
162 Glu Pro Arg Trp Asp Gln Ser Thr Phe Leu Gly Arg Ala Arg His
163
                     20
164 Phe Phe Thr Val Thr Asp Pro Arg Asn Leu Leu Ser Gly Ala
166 Gln Leu Glu Ala Ser Arg Asn Ile Val Gln Asn Tyr Arg Ala Gly
                     50
                                          55
168 Val Val Thr Pro Gly Ile Thr Glu Asp Gln Leu Trp Arg Ala Lys
                                          70
                     65
170 Tyr Val Tyr Asp Ser Ala Phe His Pro Asp Thr Gly Glu Lys Val
                     80
                                          85
172 Val Leu Ile Gly Arg Met Ser Ala Gln Val Pro Met Asn Met Thr
                                         100
173
174 Ile Thr Gly Cys Met Leu Thr Phe Tyr Arg Lys Thr Pro Thr Val
                                         115
175
176 Val Phe Trp Gln Trp Val Asn Gln Ser Phe Asn Ala Ile Val Asn
                    125
                                         130
178 Tyr Ser Asn Arg Ser Gly Asp Thr Pro Ile Thr Val Arg Gln Leu
                    140
                                         145
180 Gly Thr Ala Tyr Val Ser Ala Thr Thr Gly Ala Val Ala Thr Ala
                                         160
                    155
182 Leu Gly Leu Lys Ser Leu Thr Lys His Leu Pro Pro Leu Val Gly
                    170
                                         175
183
184 Arg Phe Val Pro Phe Ala Ala Val Ala Ala Ala Asn Cys Ile Asn
                                         190
                    185
186 Ile Pro Leu Met Arg Gln Arg Glu Leu Gln Val Gly Ile Pro Val
                     200
187
188 Ala Asp Glu Ala Gly Gln Arg Leu Gly Tyr Ser Val Thr Ala Ala
                                         220
189
190 Lys Gln Gly Ile Phe Gln Val Val Ile Ser Arg Ile Cys Met Ala
                                         235
191
                    230
192 Ile Pro Ala Met Ala Ile Pro Pro Leu Ile Met Asp Thr Leu Glu
                                         250
                    245
194 Lys Lys Asp Phe Leu Lys Val Gly Asp Cys Thr Ser Leu Val Leu
195
                    260
                                         265
196 Glu Trp Ala Met Ala Gly Arg Ser Asp Gln Ala Pro Thr Leu Ser
197
                     275
                                         280
198 Pro Ala Ser Pro Asp Ser Leu Arg Leu Ala Ser Pro Ser Pro Asp
                    290
                                         295
200 Pro Cys Thr Ala Ser Ser Thr Phe Val His Ser Ala Arg Met Asn
                    305
201
202 Trp Ala Gly Val Lys Glu Leu Cys Arg Gly Arg Arg Arg Gly Gln
                                         325
203
204 Arg Lys Glu Thr Asn Phe Ile Ser Val Thr Pro Val Ala Ser Asp
                    335
                                         340
205
206 Thr Gln Lys Gly Thr Val Ile Val Met Leu Asp Leu Met Leu Ile
                    350
                                         355
207
208 Leu Leu Pro Pro Ser Ala Ser Ile Leu Arg Gly Thr His Gly
                    365
                                         370
209
210 <210> SEQ ID NO: 4
```

```
211 <211> LENGTH: 271
212 <212> TYPE: PRT
213 <213> ORGANISM: Homo sapiens
215 <220> FEATURE:
216 <221> NAME/KEY: misc_feature
217 <223> OTHER INFORMATION: Incyte ID No: 2501034CD1
219 <400> SEQUENCE: 4
220 Met Gly Asn Gly Gly Arg Ser Gly Leu Gln Gln Gly Lys Gly Asn
221
222 Val Asp Gly Val Ala Ala Thr Pro Thr Ala Ala Ser Ala Ser Cys
                     20
                                          25
224 Gln Tyr Arg Cys Ile Glu Cys Asn Gln Glu Ala Lys Glu Leu Tyr
                     35
225
226 Arg Asp Tyr Asn His Gly Val Leu Lys Ile Thr Ile Cys Lys Ser
227
228 Cys Gln Lys Pro Val Asp Lys Tyr Ile Glu Tyr Asp Pro Val Ile
229
                                          70
                                                              75
                     65
230 Ile Leu Ile Asn Ala Ile Leu Cys Lys Ala Gln Ala Tyr Arg His
232 Ile Leu Phe Asn Thr Gln Ile Asn Ile His Gly Lys Leu Cys Ile
233
                     95
                                         100
234 Phe Cys Leu Cys Glu Ala Tyr Leu Arg Trp Trp Gln Leu Gln
235
                    110
                                         115
236 Asp Ser Asn Gln Asn Thr Ala Pro Asp Asp Leu Ile Arg Tyr Ala
                                        130
237
                    125
238 Lys Glu Trp Asp Phe Tyr Arg Met Phe Ala Ile Ala Ala Leu Glu
                    140
240 Gln Thr Ala Tyr Phe Ile Gly Ile Phe Thr Phe Leu Trp Val Glu
241
                                         160
242 Arg Pro Met Thr Ala Lys Lys Pro Asn Phe Ile Leu Leu Leu
                    170
                                         175
243
244 Lys Ala Leu Leu Ser Ser Tyr Gly Lys Leu Leu Ile Pro
                    185
                                         190
246 Ala Val Ile Trp Glu His Asp Tyr Thr Ser Val Cys Leu Lys Leu
                    200
                                         205
247
248 Ile Lys Val Phe Val Leu Thr Ser Asn Phe Gln Ala Ile Arg Val
                                         220
249
                    215
250 Thr Leu Asn Ile Asn Arg Lys Leu Ser Phe Leu Ala Val Leu Ser
                                         235
                    230
251
252 Gly Leu Leu Glu Ser Ile Met Val Tyr Phe Phe Gln Ser Met
                                         250
                    245
254 Glu Trp Asp Val Gly Ser Asp Tyr Ala Ile Phe Lys Ser Gln Asp
255
                                         265
                    260
256 Phe
258 <210> SEQ ID NO: 5
259 <211> LENGTH: 323
260 <212> TYPE: PRT
261 <213> ORGANISM: Homo sapiens
263 <220> FEATURE:
```

VERIFICATION SUMMARY

DATE: 01/14/2002

PATENT APPLICATION: US/10/009,328

TIME: 12:02:16

Input Set : A:\ippf0709usn.app.txt
Output Set: N:\CRF3\01142002\J009328.raw

L:23 M:270 C: Current Application Number differs, Replaced Current Application Number

L:24 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:27 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD